

CLAIMS

What is claimed is:

1. A handheld data processing apparatus comprising:
 - a user input component having plurality of user input elements for performing data entry and cursor control functions on the data processing apparatus;
 - a display component having a viewable area for displaying data and images processed by the data processing apparatus;
 - a first support linkage of a first length and having a first end and a second end, the first support linkage rotatably coupled to the display component at the first end and to the user input component at the second end;
 - a second support linkage of the first length and having a first end and a second end, the second support linkage rotatably coupled to the display component at the first end and the user input component at the second end;
 - a third support linkage of a second length and having a first end and a second end, the first support linkage rotatably coupled to the display component at the first end and to the user input component at the second end;
 - a fourth support linkage of the second length and having a first end and a second end, the second support linkage rotatably coupled to the display component at the first end and the user input component at the second end;
 - wherein the first, second, third, and fourth support linkages carry the display component from a first position to a second position, wherein the display component covers a plurality of the user input elements in the first position and substantially uncovers the user input elements in the second position, and wherein the viewable area of the display component is viewable in both the first and the second positions.

2. The handheld data processing apparatus as in claim 1 wherein the display component has a left side and a right side and wherein the first and third support linkages are rotatably coupled to the display component at the left side and wherein the second and fourth support linkages are rotatably coupled to the display component at the right side.

3. The handheld data processing apparatus as in claim 1 wherein the display component and/or the user input component includes tracks, and wherein the first, second, third and/or fourth support linkages include track engagements at the first ends of the support linkages and/or at the second ends of the support linkages, the track engagements rotatably engaging the support linkages with the tracks, the track engagement to shift along the tracks as the display component is moved from the first position to the second position.

4. The handheld data processing apparatus as in claim 3 wherein the display component comprises a top end and a bottom end, and wherein shifting the track engagements as the display component is moved from the first position to the second position causes the bottom end of the display component to contact at least a portion of the user input component.

5. The handheld data processing apparatus as in claim 1 further comprising a first latch to latch the display component when in the first position and a second latch to latch the display component when in the second position.

6. The handheld data processing apparatus as in claim 1 wherein a first plane defined by a surface of the user input component remains substantially

parallel with a second plane defined by a surface of the display component as the display component is moved from the first position to the second position.

7. The handheld data processing apparatus as in claim 1 wherein a first plane defined by a surface of the user input component does not remain parallel with a second plane defined by a surface of the display component as the display component is moved from the first position to the second position.

8. The handheld data processing apparatus as in claim 1 wherein the user input component comprises an alphanumeric keyboard.

9. The handheld data processing apparatus as in claim 8 wherein the user input component comprises a cursor pointing device.

10. The data processing apparatus as in claim 1 wherein the first length is equal to the second length.

11. A data processing apparatus comprising:
user input means having plurality of user input elements for performing data entry and cursor control functions on the data processing apparatus;
display means having a viewable area for displaying data and images processed by the data processing apparatus;
first support means of a first length and having a first end and a second end, the first support linkage rotatably coupled to the display means at the first end and to the user input means at the second end;

second support means of the first length and having a first end and a second end, the second support linkage rotatably coupled to the display means at the first end and the user input means at the second end;

third support means of a second length and having a first end and a second end, the first support linkage rotatably coupled to the display means at the first end and to the user input means at the second end;

a fourth support linkage of the second length and having a first end and a second end, the second support linkage rotatably coupled to the display means at the first end and the user input means at the second end;

wherein the first, second, third, and fourth support linkages carry the display means from a first position to a second position, wherein the display means covers a plurality of the user input elements in the first position and substantially uncovers the user input elements in the second position, and wherein the viewable area of the display means is viewable in both the first and the second positions.

12. The handheld data processing apparatus as in claim 11 wherein the display means has a left side and a right side and wherein the first and third support linkages are rotatably coupled to the display means at the left side and wherein the second and fourth support linkages are rotatably coupled to the display means at the right side.

13. The handheld data processing apparatus as in claim 11 wherein the display means and/or the user input means includes track means, and wherein the first, second, third and/or fourth support means include track engagement means at the first ends of the support means and/or at the second ends of the support means, the track engagement means rotatably engaging the support

means with the track means, the track engagement means to shift along the track means as the display means is moved from the first position to the second position.

14. The handheld data processing apparatus as in claim 13 wherein the display means comprises a top end and a bottom end, and wherein shifting the track engagement means as the display means is moved from the first position to the second position causes the bottom end of the display means to contact at least a portion of the user input means.

15. The handheld data processing apparatus as in claim 11 further comprising a first latch means to latch the display means when in the first position and a second latch means to latch the display means when in the second position.

16. The handheld data processing apparatus as in claim 11 wherein a first plane defined by a surface of the user input means remains substantially parallel with a second plane defined by a surface of the display means as the display means is moved from the first position to the second position.

17. The handheld data processing apparatus as in claim 11 wherein a first plane defined by a surface of the user input means does not remain parallel with a second plane defined by a surface of the display means as the display means is moved from the first position to the second position.

18. The handheld data processing apparatus as in claim 11 wherein the user input means comprises an alphanumeric keyboard.

19. The handheld data processing apparatus as in claim 18 wherein the user input means comprises a cursor pointing device.

20. The data processing apparatus as in claim 11 wherein the first length is equal to the second length.